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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/497,107 | 02/03/2000 | Jayne Brady | 10457ROUS03U | 7103 |

626 7590 06/02/2004
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CANADA

EXAMINER

PATEL, AJIT

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2664

13

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/497,107

Applicant(s)

BRADY ET AL.

Examiner

AJIT G. PATEL

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11 is/are allowed.
- 6) ☒ Claim(s) 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norman (US Patent 6,011,802) in view of Nakamura et al. (US Patent 6,385,213) in further view of Chao et al (US Patent 4,893,306).

Referring to claim 12, Norman discloses assembly of STM-N frame comprising the steps of receiving an administrative unit AU-n comprising a payload and an AU-n pointer (col.15; lines 8-36; Figure 2) and SDH interface that performs AU pointer and TU pointer translations are performed based on TU payload (col.15; lines 13-21) and a gateway converter that handles payload conversions between VTG and TUG. Norman does not expressly disclose the translation of AU payload into a TU payload in the gateway converter or SDH interface in hierarchical multiplexing and the reduction of AU pointers of very high-speed synchronous transport signal STM-N. However, Nakamura discloses the conversion of AU-n payload to TU-n payload including the corresponding pointers (col.1.3; lines 23-29). Chao discloses multiplexing tributaries having different bit rates into a common bit stream resulted in the well-known hierarchical multiplexing plan with DS-1, DS-2, DS-3 signals (col.2, 28-34). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Norman's pointer translation with Nakamura conversion of AU-n payload to TU-n payload and

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Chao multiplexing in hierarchical order. One of ordinary skill in the art would have been motivated to combine the AU to TU payload conversion techniques as Norman's converter which supports TUG (i.e. TU payload) as the combination allows for AU payload (converted to TU payload) to be handled by the gateway converter and multiplexing in hierarchical order is well known in the art with different rates into a common bit stream. The conversion capability further motivates one of ordinary skill in art to include lower hierarchy level (i.e. fine granularity) AU which is translated into TU that is subsequently hierarchy multiplexed into higher level AU which reduces AU pointers of very high speed synchronous transport signal STM-N. Higher level (i.e. coarse granularity) AU pointer is added to the higher level AU payload that forms a higher-level STM-N.

Referring to claims 13 and 14, Norman disclose all aspects of the claimed invention and further teaches the structure of STM-N (i.e. hierarchy capability inclusive of STM-4 STM-16, STM-64, and STM-256) by multiplexing multiples of AUG to achieve the desired STM level (co1.6; lines 61-62, Figure 3; references AUG and STM-N).

3. Claims 1-11 are allowed.

4. Applicant's arguments filed 5/13/04 have been fully considered but they are not persuasive. The applicant fails to argue with respect to claims 12-14.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AJIT G. PATEL whose telephone number is 703-308-5347. The examiner can normally be reached on MONDAY-THURSDAY.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AP


Ajit Patel
Primary Examiner